

CLAIMS (UNAMENDED)

Although not currently amended, the claims are reproduced below for the Examiner's convenience:

Claims 1-16 (Canceled).

Claim 17 (Previously Presented): A mixture comprising a surfactant and a cosurfactant, the cosurfactant being an amphiphilic polymer having one or more hydrophobic subunits (A) and one or more hydrophilic subunits (B), wherein one or more of said hydrophobic subunits (A) have been formed on the basis of a polyisobutene block whose polyisobutene macromolecules have terminal double bonds to an extent of at least 50 mol%.

Claim 18 (Previously Presented): The mixture according to claim 17, wherein every hydrophobic subunit (A) has been formed on the basis of a polyisobutene block whose polyisobutene macromolecules have terminal double bonds to an extent of at least 50 mol%.

Claim 19 (Previously Presented): The mixture according to claim 17, wherein said polyisobutene block has been formed from polyisobutene macromolecules of which at least 60 mol% based on the total number of polyisobutene macromolecules, have terminal double bonds.

Claim 20 (Previously Presented): The mixture according to claim 17, wherein said polyisobutene block has a number-average molecular weight M_n in the range from 200 to 20 000 daltons.

Claim 21 (Previously Presented): The mixture according to claim 17, wherein said polyisobutene block has a polydispersity index (PDI) in the range from 1.05 to 10.

Claim 22 (Previously Presented): The mixture according to claim 17, wherein one or more of said hydrophilic subunits (B) have been formed from repeat ethylene oxide units or ethylene oxide/propylene oxide units.

Claim 23 (Previously Presented): The mixture according to claim 17, wherein one or more of said hydrophilic subunits (B) have been formed from monomer units selected from the group consisting of (meth)acrylic acid, including partly or fully neutralized (meth)acrylic acid, (meth)acrylates, vinyl acetate, vinyl alcohol, vinylpyrrolidone, allyl alcohol, styrene and hydrophilic derivatives of the listed monomer units, or from mixtures thereof.

Claim 24 (Previously Presented): The mixture according to claim 17, wherein said polyisobutene block is functionalized by the introduction of polar groups and the functionalized polyisobutene block is optionally modified further.

Claim 25 (Previously Presented): The mixture according to claim 24, wherein the functionalization of the polyisobutene block is carried out by a reaction which is selected from the group consisting of:

- i) a reaction with aromatic hydroxyl compounds in the presence of an alkylation catalyst to obtain aromatic hydroxyl compounds alkylated with polyisobutenes,
- ii) a reaction of the polyisobutene block with a peroxy compound to obtain an epoxidized polyisobutene,

- iii) a reaction of the polyisobutene block with an alkene which has an electron-poor double bond (enophile) in an ene reaction,
- iv) a reaction of the polyisobutene block with carbon monoxide and hydrogen in the presence of a hydroformylation catalyst to obtain a hydroformylated polyisobutene,
- v) a reaction of the polyisobutene block with a phosphorus halide or a phosphorus oxychloride to obtain a polyisobutene functionalized with phosphine groups,
- vi) a reaction of the polyisobutene block with a borane and subsequent oxidative cleavage to obtain a hydroxylated polyisobutene,
- vii) a reaction of the polyisobutene block with an SO₃ source, preferably acetyl sulfate, to obtain a polyisobutene with terminal sulfonic acid groups, and
- viii) a reaction of the polyisobutene block with nitrogen oxides and subsequent hydrogenation to obtain a polyisobutene with terminal amino groups.

Claim 26 (Previously Presented): The mixture according to claim 17, wherein said cosurfactant has an A_pB_q structure where p and q are each independently an integer from 1 to 8, or a comb structure composed of A and B.

Claim 27 (Previously Presented): The mixture according to claim 17, wherein said surfactant is a surfactant with narrow homolog distribution.

Claim 28 (Previously Presented): The method of using a mixture according to claim 17 for stabilizing emulsions and microemulsions.

Claim 29 (Previously Presented): A microemulsion comprising a mixture of a surfactant and a cosurfactant according to claim 17, wherein said surfactant is a surfactant with narrow homolog distribution or one obtained under DMC catalysis.

Claim 30 (Previously Presented): A method of using a microemulsion according to claim 29 as a detergent, an emulsifier, a foam regulator, a wetting agent for hard surfaces and as a reaction medium for organic, inorganic, bioorganic or photochemical reactions.

Claim 31 (Previously Presented): The method according to claim 30 wherein said microemulsion is incorporated in detergents, surfactant formulations for the cleaning of hard surfaces, humectants, cosmetic, pharmaceutical and crop protection formulations, paints, coatings, adhesives, leather degreasing compositions and formulations for the textile industry, fiber processing, metal processing, food industry, water treatment, paper industry, fermentation, mineral processing and fire protection and in emulsion polymerizations.

Claim 32 (Previously Presented): The method of using a mixture according to claim 17 as a detergent, an emulsifier, a foam regulator, a wetting agent for hard surfaces and as a reaction medium for organic, inorganic, bioorganic or photochemical reactions.

Claim 33 (Previously Presented): The method according to claim 32 wherein said mixture is incorporated in detergents, surface formulations for the cleaning of hard surfaces, humectants, cosmetics, pharmaceutical and crop protection formulations, paints, coatings, adhesives, leather degreasing compositions and formulations for the textile industry, fiber processing, metal processing, food industry, water treatment, paper industry, fermentation, mineral processing, and fire protection, and in emulsion polymerization.

Claim 34 (Previously Presented): A detergent, cleaner, wetting agent, coating, adhesive, leather degreasing composition, humectant or textile treatment composition or a pharmaceutical, crop protection or cosmetic formulation, selected from the group consisting of sunscreen, skincare and hair styling composition, shower gel, shampoo, bath additive and scent oil, comprising, as well as customary ingredients, a mixture according to claim 17.